

[0024] FIG. 14 is a diagram for a fourth screen configuration for zooming out an image to correspond to an area setting action for a touchscreen according to one embodiment.

[0025] FIG. 15 is a diagram for a first screen configuration for a zoom-in/out process in accordance with a touch pattern on a touchscreen according to one embodiment.

[0026] FIG. 16 is a diagram for a second screen configuration for a zoom-in/out process in accordance with a touch pattern on a touchscreen according to one embodiment.

[0027] FIG. 17 is a diagram for a third screen configuration for a zoom-in/out process in accordance with a touch pattern on a touchscreen according to one embodiment.

[0028] Reference will now be made in detail to the preferred embodiments, examples of which are illustrated in the accompanying drawings. It is to be understood by those of ordinary skill in this technological field that other embodiments may be utilized, and structural, electrical, as well as procedural changes may be made without departing from the scope of the present disclosure. Wherever possible, the same reference numbers will be used throughout the drawings to refer to the same or like parts.

#### DETAILED DESCRIPTION OF EXEMPLARY EMBODIMENTS

[0029] FIG. 1 is a block diagram of mobile terminal 100 in accordance with one embodiment. The mobile terminal may be implemented using a variety of different types of terminals. Examples of such terminals include mobile phones, user equipment, smart phones, computers, digital broadcast terminals, personal digital assistants, portable multimedia players (PMP) and navigators, in addition to many others.

[0030] By way of non-limiting example, further description will be given with regard to a mobile terminal 100 as illustrated in the figures. Such teachings apply equally to other types of terminals. FIG. 1 shows the mobile terminal 100 having various components, but it is understood that implementing all of the illustrated components is not a requirement. Greater or fewer components may alternatively be implemented.

[0031] FIG. 1 shows a wireless communication unit 110 configured with several commonly implemented components. For instance, the wireless communication unit 110 may include one or more components which permit wireless communication between the mobile terminal 100 and a wireless communication system or network within which a mobile terminal 100 is located.

[0032] The broadcast receiving module 111 receives a broadcast signal and/or broadcast associated information from an external broadcast managing entity via a broadcast channel. The broadcast channel may include a satellite channel and a terrestrial channel. The broadcast managing entity refers generally to a system which transmits a broadcast signal and/or broadcast associated information. Examples of broadcast associated information include information associated with a broadcast channel, a broadcast program, a broadcast service provider, etc. For instance, broadcast associated information may include an electronic program guide (EPG) of digital multimedia broadcasting (DMB) and electronic service guide (ESG) of digital video broadcast-handheld (DVB-H).

[0033] The broadcast signal may be implemented as a TV broadcast signal, a radio broadcast signal, or a data broadcast signal, among others. If desired, the broadcast signal may further include a broadcast signal combined with a TV or

radio broadcast signal. The broadcast receiving module 111 may be configured to receive broadcast signals transmitted from various types of broadcast systems. By way of non-limiting example, such broadcasting systems may include digital multimedia broadcasting-terrestrial (DMB-T), digital multimedia broadcasting-satellite (DMB-S), digital video broadcast-handheld (DVB-H), the data broadcasting system known as media forward link only (MediaFLO®) and integrated services digital broadcast-terrestrial (ISDB-T). Receipt of multicast signals is also possible. If desired, data received by the broadcast receiving module 111 may be stored in a suitable device, such as memory 160.

[0034] The mobile communication module 112 may transmit or receive wireless signals to or from one or more network entities (e.g., base station, Node-B). Such signals may represent audio, video, multimedia, control signaling, or data, among others. The wireless internet module 113 supports Internet access for the mobile terminal 100. This module may be internally or externally coupled to the mobile terminal 100.

[0035] The short-range communication module 114 facilitates relatively short-range communications. Suitable technologies for implementing this module include radio frequency identification (RFID), infrared data association (IrDA), ultra-wideband (UWB), as well as the networking technologies commonly referred to as Bluetooth and ZigBee, to name a few. Position-location module 115 identifies or otherwise obtains the location of the mobile terminal 100. If desired, the position-location module 115 may be implemented using global positioning system (GPS) components which cooperate with associated satellites, network components, or combinations thereof.

[0036] Audio/video (A/V) input unit 120 is configured to provide audio or video signal input to the mobile terminal 100. As shown, the A/V input unit 120 includes a camera 121 and a microphone 122. The camera may receive and process image frames of still pictures or video. The microphone 122 may receive an external audio signal while the portable device is in a particular mode, such as phone call mode, recording mode or voice recognition mode. The audio signal may be processed and converted into digital data. The portable device, and in particular, A/V input unit 120, may include assorted noise removing algorithms to remove noise generated in the course of receiving the external audio signal. Data generated by the A/V input unit 120 may be stored in memory 160, utilized by output unit 150, or transmitted via one or more modules of communication unit 110. If desired, two or more microphones and/or cameras may be used.

[0037] The user input unit 130 generates input data responsive to user manipulation of an associated input device or devices. Examples of such devices include a keypad, a dome switch, a touchpad (e.g., static pressure/capacitance), a jog wheel or a jog switch. A specific example is one in which the user input unit 130 is configured as a touchpad in cooperation with a touchscreen display 151 (which will be described in more detail below).

[0038] In one embodiment, the touchscreen display 151 comprises a sensing unit 140 which provides status measurements of various aspects of the mobile terminal 100. For instance, the sensing unit may detect an open or closed status of the mobile terminal 100, relative positioning of components (e.g., a display and keypad) of the mobile terminal 100, a change of position of the mobile terminal 100 or a component of the mobile terminal 100, a presence or absence of user